

Listing of Claims:

Please amend the claims as follows.

Claim 1. (Previously amended) An apparatus for transmitting light comprising:

 a first substrate having a first surface including at least one first optically active area;

 a second substrate having a second surface positioned in opposing spaced apart relationship from said first surface, where said second surface has at least one second optically active area opposing said at least one first optically active area;

 a polymer layer disposed between said first and second substrates; and

 a waveguide disposed within said polymer layer between said first and second optically active areas on said first and second surfaces, where said waveguide comprises a polymer core and a cladding for transmitting light therebetween.

Claim 2. (Original) The apparatus of claim 1, wherein said cladding comprises a second polymer, and wherein said first polymer is a photosensitive polymer.

Claim 3. (Original) The apparatus of claim 2, wherein said first polymer comprises a fluorinated polymer.

Claim 4. (Original) The apparatus of claim 1, wherein said first substrate is an optical circuit board.

Claim 5. (Original) The apparatus of claim 1 wherein each of said first and second substrates comprise a plurality of optically active areas.

Claim 6. (Previously amended) The apparatus of claim 1 wherein a space between said first and second substrates is substantially filled with polymeric material.

Claim 7. (Original) The apparatus of claim 6 wherein one or more additional structures are embedded within said polymeric material.

Claim 8. (Original) The apparatus of claim 1, wherein said first and second surfaces are substantially parallel and spaced apart by a distance which is in the range of about 0.02 mm to about 0.15 mm.

Claim 9. (Original) The apparatus of claim 4, wherein said second substrate is an IC.

Claim 10. (Original) The apparatus claim 4, wherein said second substrate is a waveguide daughter board.

Claim 11. (Original) The apparatus of claim 1 wherein one of said optically active areas comprises a photodiode.

Claim 12. (Original) The apparatus of claim 1 wherein one of said optically active areas comprises a semiconductor laser.

Claims 13 – 32 (Canceled).